

EXHIBIT 2

CONFIDENTIAL

In accordance with a protective order, the enclosure(s) shall be treated as confidential and shall not be shown to any person other than those persons designated in paragraph 8.2 of the paragraph order.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF WYOMING

CUSTODIA BANK, INC.	}	
	}	
Plaintiff,	}	
	}	
vs.	}	Civil No. 1:22-cv-00125-SWS
	}	
FEDERAL RESERVE BOARD OF	}	
GOVERNORS and FEDERAL RESERVE	}	
BANK OF KANSAS CITY,	}	
	}	
Defendants.	}	

EXPERT REPORT OF MORGAN RICKS

EXPERT REPORT OF MORGAN RICKS

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	Qualifications.....	1
B.	Compensation Disclosure	2
C.	Documents Considered	2
II.	SUMMARY OF OPINIONS	3
III.	THE FED’S EXERCISE OF DISCRETION OVER ACCESS TO MASTER ACCOUNTS AND RELATED FED SERVICES IS CONSISTENT WITH HISTORY AND PRACTICE WITHIN THE U.S. FINANCIAL SYSTEM.....	3
IV.	NUMEROUS NEGATIVE CONSEQUENCES COULD FLOW FROM INSUFFICIENT DISCRETION OVER ACCESS TO MASTER ACCOUNTS AND RELATED FED SERVICES.	12
A.	Counterparty Credit Risk.....	13
B.	Liquidity Risk and Fed Balance Sheet Distortion.....	14
C.	Monetary Policy Implementation	15
D.	Law Enforcement and Counterterrorism	16
E.	Cybersecurity and Fraud Prevention.....	17
F.	Unintended Consequences.....	18
V.	CONCLUSION.....	19

I, Morgan Ricks, declare and state as follows:

I. INTRODUCTION

A. Qualifications

1. I am the Herman O. Loewenstein Chair in Law at Vanderbilt University Law School, where I was the 2019–20 Enterprise Scholar and a 2020–21 Chancellor’s Faculty Fellow. In 2019, I was the Caryl Louise Boies Visiting Professor at New York University School of Law, and in 2010–2012, I was a Visiting Assistant Professor at Harvard Law School. I teach courses in:

the regulation of financial institutions; corporations and business entities; mergers and acquisitions; and networks, platforms, and utilities.

2. In 2009 and 2010, I was a senior policy advisor and financial restructuring expert at the U.S. Treasury Department, where I focused primarily on financial stability initiatives and capital markets policy. Before joining the Treasury Department, I was a risk-arbitrage trader at Citadel Investment Group, a Chicago-based hedge fund. I previously served as a vice president in the investment banking division of Merrill Lynch & Co., where I specialized in strategic and capital-raising transactions for financial services companies. I began my career as a mergers and acquisitions attorney at Wachtell, Lipton, Rosen & Katz. I received a B.A. from Dartmouth College and a J.D. from Harvard Law School.

3. I have consulted on two previous litigation matters. I served as a consultant to plaintiffs' counsel in *Iowa Public Employees' Retirement System et al. v. Bank of America Corporation et al.*, Southern District of New York, No. 1:17-cv-06221. I served as an expert witness in *Chabot et al. v. Walgreens Boots Alliance, Inc. et al.*, Middle District of Pennsylvania, No. 1:18-cv-02118, in which I was deposed.

B. Compensation Disclosure

4. Defendant Federal Reserve Bank of Kansas City ("Defendant") is paying an hourly fee of \$1,000 for my work on this matter. My compensation is not contingent on any outcome in this case. The views expressed herein are my own.

C. Documents Considered

5. In preparing this report, I have considered the materials referenced in Exhibit 2.

II. SUMMARY OF OPINIONS

6. I have been retained by Defendant to provide an expert opinion on two questions. First, is the Federal Reserve's¹ exercise of discretion over access to master accounts and related Fed services consistent with history and practice within the U.S. financial system? I conclude that it is (see Part III). Second, is such discretion consistent with U.S. public policy? I conclude that it is, and that indeed, numerous negative consequences could flow from insufficient discretion over access to master accounts and related services (see Part IV). My opinions are offered in rebuttal to certain claims in the Expert Report of Peter Conti-Brown, Ph.D., prepared on behalf of plaintiff in this case (hereinafter "Conti-Brown Report").

III. THE FED'S EXERCISE OF DISCRETION OVER ACCESS TO MASTER ACCOUNTS AND RELATED FED SERVICES IS CONSISTENT WITH HISTORY AND PRACTICE WITHIN THE U.S. FINANCIAL SYSTEM.

7. Conti-Brown opines that the Fed's exercise of discretion over master account access "fundamentally remakes the nature of the US financial and banking system," in particular by "upset[ting]" America's distinctive and longstanding dual banking system.² These views are not supportable.

8. By way of background, it should be noted that the federal financial regulatory and supervisory bodies are endowed with considerable discretion in a wide variety of contexts, extending far beyond master account access. For example, the Federal Deposit Insurance

¹ Throughout this report, I use "Federal Reserve" and "Fed" to refer to all or any part of the Federal Reserve System, which includes the Board of Governors of the Federal Reserve System, the twelve regional Federal Reserve Banks, and the Federal Open Market Committee. I express no opinion in this report on (1) the actual or appropriate locus of any activity—including, but not limited to, regulation, supervision, and provisioning of services—within the Federal Reserve System or (2) the legal status (if any) of the Federal Reserve System or any of its components within the U.S. administrative state.

² Conti-Brown Report at 4-5.

Corporation (FDIC) exercises discretion over access to federal deposit insurance,³ and the Office of the Comptroller of the Currency (OCC) exercises discretion in granting national bank charters.⁴ The FDIC and OCC each conduct detailed reviews of the organizers' backgrounds and business plans before conferring access. For its part, the Federal Reserve exercises discretion over, among other things: membership in the Federal Reserve System,⁵ access to emergency loans,⁶ to the occasional consternation of entities not receiving them,⁷ and certain critical "safety and soundness" judgments, such as whether to impose so-called countercyclical capital requirements and so-called capital surcharges on the largest U.S. banks.⁸

9. Furthermore, all three federal banking authorities—the Fed, the OCC, and the FDIC—engage in bank supervision, a distinctive mode of economic governance in which the exercise of discretion is paramount. As Conti-Brown has noted, bank supervision is "about the

³ See 12 U.S.C. § 1816 (delineating the factors to be considered by the FDIC in connection with considering deposit insurance applications, including "future earnings prospects," "the general character and fitness of the management," and "the convenience and needs of the community to be served").

⁴ See 12 C.F.R. § 5.20 (Organizing a National Bank or Federal Savings Association); OFFICE OF THE COMPTROLLER OF THE CURRENCY, COMPTROLLER'S LICENSING MANUAL: CHARTERS (2021).

⁵ See 12 C.F.R. § 208.3 (Application and Conditions for Membership in the Federal Reserve System).

⁶ See 12 U.S.C. § 343(3); 12 C.F.R. § 201.4(d)(11); 12 C.F.R. § 201.3(b).

⁷ See, e.g., James B. Stewart, *Eight Days*, New Yorker, Sept. 14, 2009 (describing a member of Lehman Brothers' board stating "They bailed out Bear [Stearns]—why not us?" when the Federal Reserve Bank of New York denied the firm a rescue loan on September 14, 2008, precipitating the firm's bankruptcy filing).

⁸ See 12 U.S.C. 3907(a)-(b); 12 C.F.R. § 217.11 ("The [Fed] Board will base its decision to adjust the countercyclical capital buffer amount under this section on a range of macroeconomic, financial, and supervisory information indicating an increase in systemic risk including, but not limited to, the ratio of credit to gross domestic product, a variety of asset prices, other factors indicative of relative credit and liquidity expansion or contraction, funding spreads, credit condition surveys, indices based on credit default swap spreads, options implied volatility, and measures of systemic risk."); *id.* § 217.400 ("The [Fed] Board may apply [the capital surcharge for global systemically important financial institutions] to any Board-regulated institution, in whole or in part, by order of the Board based on the institution's capital structure, size, level of complexity, risk profile, scope of operations, or financial condition.").

flexible use of discretion.”⁹ Unlike rulemaking and adjudication, supervision represents a cooperative mode of governance that proceeds through confidential dialogue and iterative—in some cases, continuous—company-specific engagement.¹⁰ Courts have held that the federal banking authorities’ “discretionary authority” to engage in supervision “is to be liberally construed.”¹¹

10. Viewed in this broader context, it should be clear that the Federal Reserve’s exercise of discretion over access to master accounts and related services is unremarkable and consistent with history and practice within the U.S. financial system. Indeed, as I explain below, the *absence* of discretion would constitute a departure from history and practice in U.S. financial policy.

11. Nor does the Fed’s exercise of discretion over access to master accounts and related services upset or undermine America’s dual banking system. Dual banking refers to an arrangement under which bank organizers may choose between a federal charter from the OCC or a state charter from one of the fifty states.¹² Whereas federally chartered banks are regulated and supervised by the OCC, state banks are regulated and supervised by state banking agencies. In

⁹ Peter Conti-Brown & Sean Vanatta, *Risk, Discretion, and Bank Supervision*, working paper, Mar. 30, 2023. See also Lev Menand, *Why Supervise Banks: The Foundations of the American Monetary Settlement*, 74 VAND. L. REV. 951 (2021) (describing bank supervision as “discretionary government oversight”); cf. *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 330 (1963) (describing “[f]ederal supervision of banking” as “‘one of the most successful (systems of economic regulation), if not the most successful’” to which “we may owe, in part, the virtual disappearance of bank failures” (emphasis added) (quoting 1 KENNETH CULP DAVIS, ADMINISTRATIVE LAW § 4.04, at 247 (1958))).

¹⁰ See Menand, *supra* note 9, at 951–2.

¹¹ *Indep. Bankers Ass’n of Am. v. Heimann*, 613 F.2d 1164 (D.C. Cir. 1979).

¹² See, e.g., MICHAEL S. BARR, HOWELL E. JACKSON & MARGARET E. TAHYAR, FINANCIAL REGULATION: LAW AND POLICY 166 (2nd ed. 2018) (“[T]he United States has . . . a dual bank chartering and regulatory system, with both the federal and state governments involved in chartering and regulation of commercial banks and . . . other types of depository institutions”). At least some commonwealths and territories of the United States also charter or license banking organizations. Among these, the Fed serves Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands. See Structure of the Federal Reserve System, available at <https://www.federalreserve.gov/aboutthefed/structure-federal-reserve-system.htm>.

addition, the Fed supervises and regulates state banks that are “member banks” of the Fed, and the FDIC supervises and regulates FDIC-insured “nonmember banks.” A state bank that is neither a member bank nor FDIC-insured is not regulated or supervised by any of the OCC, the Fed, or the FDIC.

12. To see why the Fed’s exercise of discretion over master account access doesn’t upset the dual banking system, it is helpful to understand the history of dual banking and how its contours have evolved over time. Dual banking is something of a historical accident. Congress sought by the Banking Acts of 1863 and 1864 and contemporaneous enactments to push state banks to adopt federal charters, or else exit the banking business altogether.¹³ As Conti-Brown writes in his coauthored textbook on the law of financial institutions, Congress’s efforts to do so were upheld by the Supreme Court, “establishing an important precedent for the federal government’s power to discriminate for regulatory purposes against an otherwise lawful industry.”¹⁴ But state banks found a way around the new law, and in the decades that followed, a race to the bottom ensued: according to Conti-Brown’s textbook, “[s]tates won the race for new banking charters by offering bankers more flexibility than the national charter: no reserve requirements; much lower minimum shareholders’ equity; and looser restrictions on the types of investments a bank could make.”¹⁵ A major banking panic, which was triggered by problems at

¹³ National Currency Act of 1863, ch. 58, 12 Stat. 665; National Bank Act of 1864, ch. 106, 13 Stat. 99; Act of Mar. 3, 1865, ch. 78, 13 Stat. 469, 484 (levying a prohibitory 10% tax on the notes of state banks); *see generally* Lev Menand & Morgan Ricks, *Federal Corporate Law and the Business of Banking*, 88 U. CHI. L. REV. 1361 (2021).

¹⁴ *See* RICHARD SCOTT CARNELL, JONATHAN R. MACEY, GEOFFREY P. MILLER & PETER CONTI-BROWN, *THE LAW OF FINANCIAL INSTITUTIONS* 25 (2021).

¹⁵ *Id.*; *See also* BARR, JACKSON & TAHYAR, *supra* note 12, at 41 (noting that during this period “state regulators and lawmakers loosened capital and activity restrictions on state banks and cut fees that banks paid for examinations”).

state-chartered trust companies, followed in 1907, precipitating a deep recession.¹⁶ With the enactment of the Federal Reserve Act of 1913, Congress sought among other things to exert greater federal control over state banks, but this effort too proved largely ineffective, as many state banks declined to join the Federal Reserve System on account (at least in part) of the more stringent regulatory requirements that came with membership.¹⁷ Congress's third, and more successful, effort to bring state banks under effective federal regulation and supervision came during the Great Depression, when it established the FDIC.¹⁸ At the inception of federal deposit insurance in 1934, 90 percent of commercial banks participated.¹⁹

13. In the decades following the FDIC's creation, state-chartered banks typically had FDIC insurance (and therefore a federal supervisor) but, unless they joined the Federal Reserve System, they did not have direct access to Federal Reserve accounts and services. If direct access to Fed accounts and services by all state-chartered depository institutions were indispensable to dual banking, as Conti-Brown contends, it would follow that dual banking must not have existed in any meaningful respect in the decades between the Fed's establishment in 1913 and the enactment of the Monetary Control Act of 1980 (MCA), during which no state nonmember bank had a deposit account at the Fed. Yet countless state nonmember banks were in business all around the country in those decades. States' chartering, regulation, and supervision of banks were alive and well. In my years studying U.S. banking law and its history, I have never encountered the

¹⁶ See MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* 103 (2016).

¹⁷ See, e.g., *id.* at 187.

¹⁸ See MORGAN RICKS, GANESH SITARAMAN, SHELLEY WELTON & LEV MENAND, *NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY* 861–62 (2022) (“Congress created the Federal Reserve . . . in part to subject state-chartered banks to federal authority, and a further attempt followed in 1933 when Congress created the Federal Deposit Insurance Corporation.”).

¹⁹ See FEDERAL DEPOSIT INSURANCE CORPORATION, *THE FIRST FIFTY YEARS: A HISTORY OF THE FDIC, 1933–1983* 46 (1984).

claim that dual banking was inoperative between 1913 and 1980. Not even Conti-Brown's coauthored textbook makes any such claim: despite devoting significant attention to the dual banking system and its history,²⁰ the textbook does not mention the MCA or access to master accounts in connection with dual banking, so far as I can tell. Although the other modern law school textbook on the law of financial institutions does briefly mention the MCA in the context of dual banking, the mention has nothing to do with master accounts: rather, the book notes only that the MCA promoted competitive equality between member and nonmember banks by *increasing* regulatory requirements on *nonmember* banks.²¹

14. In fact, one of the main motivations for the MCA's enactment was that the Fed's control over the money supply was being compromised because the burdens of Fed membership were *pushing banks out* of the Federal Reserve System. As the Congressional Research Service reported on the eve of the MCA's enactment:

The proportion of banks with membership in the [Federal Reserve System (FRS)] relative to total banks in the country has been declining since 1946. In recent years, this decline has accelerated. Deposits in FRS member banks now constitute about 70% of total bank deposits as compared with 81% ten years ago and 77% five years ago. The “burden of membership” . . . is cited as the cause for this phenomenon . . . [A]n increasing number of member banks have concluded that the cost of [membership] exceeds the value of services obtained on the basis of membership and have opted to leave the FRS.²²

15. In other words, at the time of the passage of the MCA, member banks were in some sense perceived to be at a *disadvantage* relative to nonmember banks. This was despite the fact that, prior to the MCA, the Fed provided payment services to member banks for free. Since the MCA, the Fed has been required to price its services so as to “take[] into account the taxes that

²⁰ See CARNELL, MACEY, MILLER & CONTI-BROWN, *supra* note 14, at 25–27, 90–100.

²¹ BARR, JACKSON & TAHYAR, *supra* note 12, at 180 (“As a result of [the MCA], state-chartered nonmember banks lost most of the competitive advantage of differing state-law reserve requirements.”).

²² Roger White, *Federal Reserve Membership and Monetary Control Issue Brief Number IB79047*, CONGRESSIONAL RESEARCH SERVICE, Feb. 26, 1980.

would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm.”²³ This provision was intended in part to encourage competition in payments from the private sector.²⁴ Today, for example, the privately owned Clearing House Interbank Payments System (CHIPS) operates as a competitor to the Fed’s Fedwire system.²⁵

16. Conti-Brown’s claim that Fed account access is central to the dual banking system might have merit if, as he asserts, the business of banking could not be conducted without access to an account at the Fed.²⁶ But the fact that state nonmember banks existed all around the country between 1913 and 1980—when none of them had Fed accounts—conclusively demonstrates otherwise. Financial institutions that do not have accounts at the Fed have always been able to “plug in” to the Federal Reserve’s payment services through correspondent banking relationships, in which one bank provides payment clearing services to another bank.²⁷ “Commercial banks that do not have accounts at the Federal Reserve,” writes the Fed, “can access payment services, such as access to currency, through correspondent banking services.”²⁸ Before state nonmember banks

²³ 12 U.S.C. § 248a(c).

²⁴ See Board of Governors of the Federal Reserve System, *Principles for the Pricing of Federal Reserve Bank Services*, Nov. 20, 2008, https://www.federalreserve.gov/paymentsystems/pfs_principles.htm.

²⁵ See About CHIPS, <https://www.theclearinghouse.org/payment-systems/CHIPS>; Fedwire Funds Service Disclosure, 6–7, <https://www.frbervices.org/binaries/content/assets/crsocms/financial-services/wires/funds-service-disclosure.pdf>.

²⁶ See, e.g., Conti-Brown Report at 4 (a depository institution that is denied access to a master account “can’t really function as a financial institution. It becomes instead a kind of storage locker.”).

²⁷ See, e.g., BARR, JACKSON & TAHYAR, *supra* note 12, at 42 (“[T]he practice of settling transactions by adjusting interbank deposits is referred to as correspondent banking . . .”). In some contexts, the Federal Reserve uses “Correspondent” narrowly to refer to a bank that allows other banks to settle transactions in its master account. See, e.g., Federal Reserve Operating Circular No. 1, effective Sept. 1, 2023. I use “correspondent” herein in the conventional, commercial sense.

²⁸ BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *MONEY AND PAYMENTS: THE U.S. DOLLAR IN THE AGE OF DIGITAL TRANSFORMATION* 30n50 (2022).

gained the ability to access Fed accounts and related Fed services, they maintained correspondent banking relationships with member banks, allowing them to clear checks and wire transfers with other financial institutions throughout the country.²⁹ Accordingly, when Conti-Brown writes that “the only way to access Federal Reserve services such as check clearing and wire transfer services is through [a master] account”³⁰ and that having a master account determines “whether a depository institution can access the entire payment and financial services system,”³¹ he is mistaken. Correspondent banking is a long-established feature of the American domestic payments system as well as international payments.³²

17. Although it is true that correspondent banks charge fees for their services, banks have nonetheless always been able to access the Federal Reserve’s payment services without directly maintaining accounts at the Fed. Accordingly, Fed discretion over master account access in no way displaces states’ chartering, regulation, and supervision of banks—the basis for the dual banking system. Contra Conti-Brown, such discretion does not make the Fed “the de facto re-chartering authority for every depository institution in the country”³³ (much less the “primary

²⁹ See, e.g., G. William Miller, Chairman, Board of Governors of the Federal Reserve System, Statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Feb. 26, 1979 (“Nonmember deposits at correspondent banks can serve the same purpose [as reserve balances held at Federal Reserve Banks]”); Irvine H. Sprague, Chairman, Federal Deposit Insurance Corporation, Statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Mar. 27, 1979 (“The process [of payments clearing] takes place within the Federal Reserve System as a benefit of membership and outside the System in major correspondent banks that provide similar services for nonmember banks.”).

³⁰ Conti-Brown Report at 21.

³¹ *Id.* at 38.

³² See, e.g., John A. James & David F. Weiman, *From Drafts to Checks: The Evolution of Correspondent Banking Networks and the Formation of the Modern U.S. Payments System, 1850-1914*, 42 J. MONEY, CREDIT & BANKING 237 (2010).

³³ Conti-Brown Report at 6.

(re)chartering authority for the entire US financial system”³⁴) or empower it to exert “centralized federal control over every aspect of banking.”³⁵

18. More generally, having a master account is in no way necessary to engage in banking or bank-like activities, such as payment services, financial intermediation, and lending.³⁶ In fact, many financial service providers that engage in such activities do not have master accounts. For example:

- Money market mutual funds—even those that offer check-writing privileges—do not have master accounts. This \$5.7 trillion industry has been growing rapidly in recent years.³⁷
- Leading payment service providers such as Visa, Mastercard, Paypal, Venmo, and Western Union, as well as other state-licensed money transmitters and money services businesses, do not have master accounts.
- Stablecoin issuers, such as Circle, Tether, and Paxos, do not have master accounts.
- Major providers of custody services for digital assets, such as Coinbase and Paxos, do not have master accounts.
- Major providers of exchange services between U.S. dollars and digital assets, such as Coinbase and Paxos, do not have master accounts.

³⁴ *Id.* at 35.

³⁵ *Id.* at 7.

³⁶ See CARNELL, MACEY, MILLER & CONTI-BROWN, *supra* note 14, at 63 (“We will define banks as *financial intermediaries* that offer *payment services*.”).

³⁷ See Press Release, *Money Market Fund Assets*, Investment Company Institute, Nov. 22, 2023; Eric Wallerstein, *Americans Can’t Stop Buying Money-Market Funds*, WALL ST. J., Aug. 11, 2023.

- Mortgage companies, broker-dealers, insurance companies, private investment funds, check cashers, and payday lenders—all of which play substantial roles in financial intermediation, payments, or both—do not have master accounts.

19. Given that such businesses can and do thrive without access to accounts at the Fed, it is erroneous to assert that exercising discretion over master account access allows the Fed to determine “what constitutes the appropriate provision of banking and financial services anywhere within the reach of the global banking system”³⁸ or “places [the Fed] in the position of evaluating every risk and every novelty everywhere in the financial system.”³⁹

20. For the foregoing reasons, I conclude that the Fed’s exercise of discretion over master account access is fully consistent with history and practice within U.S. financial regulatory policy and does not “fundamentally remake[] the nature of the US financial and banking system” or “upset” the dual banking system.

IV. NUMEROUS NEGATIVE CONSEQUENCES COULD FLOW FROM INSUFFICIENT DISCRETION OVER ACCESS TO MASTER ACCOUNTS AND RELATED FED SERVICES.

21. Not only is the Fed’s exercise of discretion over access to master accounts and related Fed services consistent with history and practice in the U.S. financial system, but, contrary to Conti-Brown’s opinion, it is fully consistent with the public policy of the U.S. government and the Fed.⁴⁰ In particular, the absence of such discretion could have negative consequences for the

³⁸ *Id.* at 6-7.

³⁹ *Id.* at 36.

⁴⁰ *Cf.* Conti-Brown opinion at 8 (stating that the exercise of such discretion is “inconsistent with the . . . public policy of the US government and the Federal Reserve itself”).

Fed, the financial system, and the American public. Those risks include, but are by no means limited to, the following.

A. Counterparty Credit Risk

22. Holders of master accounts pose counterparty credit risk to the Fed, exposing the American public to potential losses. In the ordinary course of their businesses, banks may incur negative balances in their master accounts when processing funds transfers on behalf of their customers. To keep the payment system operating smoothly and reduce the systemic risks that would arise from payment disruptions, the Fed extends intraday credit, or “daylight overdraft,” to master account holders when their account balances fall below zero during the day. It also extends “overnight overdraft” to master account holders with negative balances at the close of the business day. Overdrafts are loans from the Fed, and like any loan, they pose risks to the lender. As the Fed notes: “If an institution were to fail after sending a funds transfer, for example, that left its account in an overdraft position, the Federal Reserve may be obligated to cover the payment and bear any resulting losses. The Federal Reserve’s exposure in such instances could be significant.”⁴¹ The Fed is also exposed to credit risk when there are mismatches in check clearing operations, specifically when it credits a bank’s master account for a payment before the account of the paying bank is charged. This difference, called “float,” is in effect a loan from the Fed to the receiving bank, giving rise to credit risk and potential Fed losses.⁴²

⁴¹ Guide to the Federal Reserve’s Payment System Risk Policy on Intraday Credit, effective July 20, 2023.

⁴² See Board of Governors of the Federal Reserve System, “Factors Affecting Reserve Balances of Depository Institutions,” *available at* www.federalreserve.gov/monetarypolicy/reservebalances_print.htm.

23. Losses incurred by the Fed fall on the American people. The Fed periodically remits its earnings to the U.S. Treasury Department; they flow to the public fisc.⁴³ Specifically, the Federal Reserve Banks are required by law to transfer their net earnings to the U.S. Treasury, thereby directly supporting the expenditures of the U.S. government. When the Fed loses money on a loan, its earnings and remittances to Treasury are lower than they would otherwise have been. To make up the difference, the government must either tax more or borrow more to support any given level of expenditure.

24. No private sector financial institution would extend a loan without conducting any screening or analysis of the borrower. Yet if the Fed were unable to exercise discretion over master account access, it could be put into the unenviable position of either extending credit to potentially unsound borrowers or else allowing settlement risks to be introduced into, and to potentially propagate throughout, the payment and financial system.

B. Liquidity Risk and Fed Balance Sheet Distortion

25. Certain banking business models, if permitted access to master accounts, could generate liquidity imbalances within the banking system. For example, consider a so-called “narrow” or “full reserve” bank—a bank holding 100 percent of customer deposits in cash.⁴⁴ If such a bank (which could be organized, for example, under Wyoming’s Special Purpose Depository Institutions (SPDI) statute⁴⁵) gained access to master accounts, it would offer its

⁴³ See, e.g., Board of Governors of the Federal Reserve System, Press Release, “Federal Reserve Board announces Reserve Bank income and expense data and transfers to the Treasury for 2022,” Jan. 13, 2023 (“The Federal Reserve Board on Friday announced preliminary financial information indicating that the Federal Reserve Banks had estimated net income of \$58.4 billion in 2022. . . . The Federal Reserve Act requires the Reserve Banks to remit excess earnings to the U.S. Treasury after providing for operating costs, payments of dividends, and any amount necessary to maintain surplus.”).

⁴⁴ The idea of such a banking model goes back at least to the 1930s. See, e.g., IRVING FISHER, 100% MONEY (1936).

⁴⁵ WY STAT., Title 13, ch. 12 (Special Purpose Depository Institutions).

depositors, in effect, pass-through deposits to the Fed. Such depositors could hold large balances with virtually no risk of loss, while potentially receiving something close to the interest rate the Fed pays on master account balances (currently 5.40%).⁴⁶ If large quantities of deposits migrated from existing commercial banks to narrow banks, commercial banks might face liquidity shortfalls. Although the Fed could conceivably lend money to commercial banks to replenish their cash balances, this would impose risks on the Fed (see “counterparty credit risk” above) while also swelling its balance sheet in contravention of its publicly stated plans for balance sheet shrinkage.⁴⁷ These negative outcomes supply an important rationale for the Fed’s discretion over master account access.

C. Monetary Policy Implementation

26. Certain banking business models could interfere with the Fed’s conduct of monetary policy if given master accounts. I already mentioned one example above: a narrow bank business model could lead the Fed’s balance sheet to swell, which could impede the Fed’s efforts to fight inflation. (*Ceteris paribus*, a large Fed balance sheet equates to more expansionary monetary policy and more inflation.)

27. Another example would be a bank that issued noninterest-bearing stablecoins. To see how giving a master account to such a bank could affect monetary policy, some background is needed. Payment of interest on balances held in master accounts is one of the key tools the Fed

⁴⁶ See Board of Governors of the Federal Reserve System, Interest Rate on Reserve Balances, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IORB>, November 30, 2023.

⁴⁷ See Board of Governors of the Federal Reserve System, press release, “Plans for Reducing the Size of the Federal Reserve’s Balance Sheet,” May 4, 2022; see also Board of Governors of the Federal Reserve System, press release, “Principles for Reducing the Size of the Federal Reserve’s Balance Sheet,” January 26, 2022 (noting the Federal Open Market Committee’s desire to “minimiz[e] the effect of Federal Reserve holdings on the allocation of credit across sectors of the economy”).

uses to implement monetary policy.⁴⁸ To fend off inflation, it raises those interest payments; to stimulate economic activity, it lowers them. This tool can only work, though, if the Fed's rate changes "pass through" to bank customers in the broader economy.⁴⁹

28. If noninterest-bearing stablecoins were backed by funds in a master account, the interest rate paid on those Fed balances would not pass through to bank customers. Instead, that value would be captured by the bank's shareholders. Such a bank would reap economic rents from the public without acting as a conduit for monetary policy. The Fed pays interest on master account balances not to enrich private shareholders but to effectuate its macroeconomic objectives. Lack of discretion over access to master accounts could frustrate those objectives.

D. Law Enforcement and Counterterrorism

29. The Bank Secrecy Act of 1970 (BSA),⁵⁰ as amended by the PATRIOT Act,⁵¹ requires financial institutions to assist the government in preventing money laundering, combating terrorist financing, and addressing other suspicious financial activities. These laws and the rules promulgated thereunder require banks to, among other things, conduct customer due diligence before opening new bank accounts.⁵² Federal banking supervisors devote considerable supervisory resources to examining banks' BSA/anti-money laundering (AML) programs, policies, and practices.⁵³

⁴⁸ See, e.g., THE FEDERAL RESERVE SYSTEM: PURPOSES AND FUNCTIONS 40 (2016)

⁴⁹ See, e.g., Darrell Duffie & Arvind Krishnamurthy, *Pass-Through Efficiency in the Fed's New Monetary Policy Setting*, in ECONOMIC POLICY SYMPOSIUM PROCEEDINGS 21 (2016)

⁵⁰ 31 U.S.C. § 5311 et seq.

⁵¹ Pub. L. No. 107-56, Title III, 115 Stat. 272, 296 (2001).

⁵² See 31 C.F.R. § 1020.220.

⁵³ See, e.g., Federal Financial Institutions Examination Council, *Bank Secrecy Act (BSA)/Anti-Money Laundering (AML) Examination Manual* (2015).

30. If the Fed lacked any discretionary authority over access to master accounts and related services, it would be required to allow usage of its facilities by banks lacking any federal supervisor. Different states and territories may view the sufficiency of banks' BSA/AML programs, policies, and practices differently and apply less stringent oversight. Moreover, some state and territorial jurisdictions may have insufficient supervisory resources to provide adequate BSA/AML supervision. For example, the Treasury Department observed last year in the National Money Laundering Risk Assessment that "[a]t the territorial level, Puerto Rico has faced an ongoing financial crisis and disruption in the aftermath of Hurricane Maria, complicating efforts for local supervisors to effectively oversee these entities to ensure compliance with the BSA according to local laws."⁵⁴ As shown in the recent case of *Banco San Juan Internacional, Inc. v. Federal Reserve Bank of New York*, this issue of poor BSA/AML oversight is not merely hypothetical.⁵⁵

31. Accordingly, if the Fed lacked any discretionary authority over access to master accounts and related services, federal law enforcement and counterterrorism efforts could be hindered.

E. Cybersecurity and Fraud Prevention

32. A lack of discretion over master account access could place a significant new burden on the Fed in the area of cybersecurity and fraud prevention. Criminals and fraudsters can target master accounts just as they target existing retail banks and payment networks.⁵⁶ For example, in 2016, hackers attempted to transfer up to \$1 billion from Bangladesh Bank's account

⁵⁴ U.S. TREASURY DEPARTMENT, NATIONAL MONEY LAUNDERING RISK ASSESSMENT 69–70 (Feb. 2022).

⁵⁵ Memorandum Opinion and Order, S.D.N.Y., Oct. 24, 2023.

⁵⁶ See *Timeline of Cyber Incidents Involving Financial Institutions*, Carnegie Endowment for International Peace, <https://carnegieendowment.org/specialprojects/protectingfinancialstability/timeline>

in the Federal Reserve Bank of New York to accounts in the Philippines.⁵⁷ Since then, the Fed has taken measures to improve its fraud detection systems.⁵⁸ If the Fed lacked discretion over master account access, it would have no reliable way of assuring that holders of master accounts maintained appropriate security over their funds held at the Fed.

F. Unintended Consequences

33. If the Fed lacked discretion over access to master accounts, other negative scenarios are readily foreseeable. Enterprising states or territories of the United States could develop new bank charters that would result in usage of accounts at the Fed in ways that Congress never intended. For example, suppose that a state or territory, perhaps succumbing to what former Fed Chair Arthur Burns called “competition in laxity,”⁵⁹ sought to win market share in digital asset or other financial businesses by enacting a “free banking” statute with no regulatory apparatus or supervision whatsoever.⁶⁰ Would such banks be automatically entitled to master accounts? What would be the potential effects on financial stability, monetary policy implementation, money laundering and terrorism financing, and other areas of federal legislative policy? Or, suppose a state or territory enacted a “self-depository” statute that allowed any firm or individual to establish, for a small fee, an unregulated and unsupervised “bank” subsidiary to hold its own cash. Would every firm and individual then have direct access to a master account? Existing legislation clearly

⁵⁷ See Devlin Barrett & Katy Burne, *FBI Investigating Bangladesh Bank-Account Heist*, WALL ST. J., Mar. 18, 2016.

⁵⁸ *Fed Develops New Fraud Prevention Model*, CENT. BANKING (June 19, 2020), <https://www.centralbanking.com/central-banks/financial-market-infrastructure/7564751/fed-develops-new-fraud-prevention-model>.

⁵⁹ Address by Chairman Aurther Burns, “Maintaining the Soundness of Our Banking System,” American Bankers Association Convention, Honolulu (Oct. 21, 1974).

⁶⁰ For examples of such proposals, see GEORGE A. SELGIN, *THE THEORY OF FREE BANKING* (1988); KEVIN DOWD, *LAISSEZ-FAIRE BANKING* (1996).

does not contemplate such an outcome. It is one thing to celebrate states' roles as laboratories of democracy and experimentation in banking. It is quite another to suggest that any enterprise deemed a "bank" or "depository institution" by any state or territory must *ipso facto* be entitled to direct access to the central bank's balance sheet and access to Fed services.

34. States and territories and their respective banking divisions, unlike the Fed, have neither the mandate nor the same incentive to safeguard the country's payment system. To return to the theme of the previous Part, what would be inconsistent with history, practice, and public policy in the U.S. financial system and upset the principles underlying the dual banking system would be *denying* the Fed the discretion over access to master accounts and related Fed services.

V. CONCLUSION

35. For the reasons set forth above, I conclude that the Federal Reserve's exercise of discretion over access to master accounts and related Fed services is consistent with history and practice within the U.S. financial system, and that numerous negative consequences could flow from insufficient discretion over access to master accounts and related services. Because discovery is ongoing, I reserve the right to modify or supplement the opinions set forth in my report and the bases for those opinions.

December 4, 2023

Date



By: Morgan Ricks

EXHIBIT 1

Morgan Ricks

Vanderbilt University Law School

131 21st Avenue South • Nashville, TN 37203

morgan.ricks@vanderbilt.edu

(615) 322-6663 (office); (646) 717-4221 (mobile)

ACADEMIC APPOINTMENTS

Vanderbilt University Law School, Nashville, TN 2012 – Present

Herman O. Loewenstein Chair in Law (2022 to present); Co-Faculty Director, Project on Networks, Platforms, and Utilities, Vanderbilt Policy Accelerator (2023 to present); Chancellor's Faculty Fellow (2020 – 2021); Enterprise Scholar (2019 to 2020), Professor (2017 to present), Associate Professor (2015 – 2017), Assistant Professor (2012 – 2015). Courses: Regulation of Financial Institutions; Corporations and Business Entities; Mergers and Acquisitions; Networks, Platforms, and Utilities; Regulating Financial Stability (seminar); Legal Structure of Capitalism (seminar); Economic Regulation of Finance (seminar).

New York University School of Law, New York, NY

Fall 2019

Caryl Louise Boies Visiting Professor of Law

Courses: Regulation of Financial Institutions; Legal Structure of the Market (seminar).

Harvard Law School, Cambridge, MA

2010 – 2012

Visiting Assistant Professor. Courses: Regulation of Financial Institutions; The Financial Crisis and the Policy Response; Regulating Financial Stability (seminar); History of Financial Crises (reading group).

PROFESSIONAL EXPERIENCE

U.S. Department of the Treasury, Washington, DC

2009 – 2010

Senior Policy Advisor and Financial Restructuring Expert, Domestic Finance Division, Crisis Response Team/Office of Capital Markets. Responsibilities included transaction structuring and execution, capital markets policy development, and financial regulatory reform development.

Citadel Investment Group, Chicago, IL and New York, NY

2007 – 2009

Investment Professional, Principal Strategies Group. Risk-arbitrage, event-driven and special situations investing. Expertise in complex situations such as hostile offers, shareholder insurgencies, litigated deals, and transactions with complex regulatory issues.

Merrill Lynch & Co., New York, NY

2005 – 2007

Vice President, Financial Institutions Group, Investment Banking Division. Provided advisory and execution services to the firm's financial services clients on strategic and capital-raising transactions.

Wachtell, Lipton, Rosen & Katz, New York, NY

2001 – 2004

Associate, Corporate Group. Attorney in the firm's mergers and acquisitions practice, with engagements in strategic transactions, leveraged buyouts, and hostile defense, as well as general corporate governance advice.

EDUCATION

Harvard Law School, J.D., *magna cum laude*, 2001
Harvard Law Review, Book Reviews Chair

Dartmouth College, B.A., History, *summa cum laude*, 1997

BOOKS

NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY (2022) (with Ganesh Sitaraman, Shelley Welton, and Lev Menand)

THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION (U. Chicago Press, 2016)

WORKING PAPERS

How Deals Die (with Da Lin)

ARTICLES AND BOOK CHAPTERS

Rebuilding Banking Law: Banks as Public Utilities, __ YALE JOURNAL ON REGULATION __ (forthcoming 2024) (with Lev Menand)

Tech Platforms and the Common Law of Carriers, 73 DUKE LAW JOURNAL __ (forthcoming 2023) (with Ganesh Sitaraman).

Federal Corporate Law and the Business of Banking, 88 UNIVERSITY OF CHICAGO LAW REVIEW 1362 (2021) (with Lev Menand)

FedAccounts: Digital Dollars, 89 GEORGE WASHINGTON UNIVERSITY LAW REVIEW 113 (2021) (with John Crawford & Lev Menand)

Regulation and the Geography of Inequality, 70 DUKE LAW JOURNAL 1763 (2021) (with Ganesh Sitaraman & Christopher Serkin)

Money, Private Law, and Macroeconomic Disasters, 83 JOURNAL OF LAW & CONTEMPORARY PROBLEMS 65 (2020) (invited symposium contribution).

Money as Infrastructure, 2018 COLUMBIA BUSINESS LAW REVIEW 757.

Foreword to Revisiting the Public Utility, 35 YALE JOURNAL ON REGULATION 711 (2018) (with Jim Rossi) (invited symposium contribution)

The Money Problem: A Rejoinder, 8 ACCOUNTING, ECONOMICS AND LAW: A CONVIVIVUM 1 (2018).

Organizational Law as Commitment Device, 70 VANDERBILT LAW REVIEW 1303 (2017) (*reprinted in* 59 CORPORATE PRACTICE COMMENTATOR 669 (2018))

Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions, 2 JOURNAL OF FINANCIAL REGULATION 291 (2016)

Safety First? The Deceptive Allure of Full Reserve Banking, UNIVERSITY OF CHICAGO LAW REVIEW ONLINE (2016)

A Simpler Approach to Financial Reform, REGULATION (Winter 2013-2014)

A Regulatory Design for Monetary Stability, 65 VANDERBILT LAW REVIEW 1289 (2012)

Money and (Shadow) Banking: A Thought Experiment, 31 REVIEW OF BANKING AND FINANCIAL LAW 731 (2012)

The Case for Regulating the Shadow Banking System, in NEW PERSPECTIVES ON FINANCIAL STABILITY (Brookings Institution Press, 2012)

Regulating Money Creation After the Crisis, 1 HARVARD BUSINESS LAW REVIEW 75 (2011)

Reforming the Short-Term Funding Markets, Harvard John M. Olin Discussion Paper No. 713 (2011)

Shadow Banking and Financial Regulation, Columbia Law and Economics Working Paper No. 370 (2010)

INVITED PRESENTATIONS

“Rebuilding Banking Law,” Law & Macroeconomics Conference, Tulane Law School, Nov. 2023.

“Rebuilding Banking Law,” U.S. Treasury Department, Oct. 2023.

“Rebuilding Banking Law,” Legal Theory Workshop, University of Michigan Law School, Sept. 2023

“Rebuilding Banking Law,” European Commission Directorate-General for Financial Stability, Financial Services and Capital Markets Union, June 2023.

“Banks as Public Utilities: A Blueprint for Financial Reform,” MDM 2.0 Conference, Harvard Law School, June 2023.

“Banks as Public Utilities: A Blueprint for Financial Reform,” Eighth Annual Conference on Central Banking and Financial Regulation, Vanderbilt Law School, June 2023.

“Keynote Address: Networks, Platforms, and Utilities: Law & Policy,” Innovation, Networks, and the Frontiers of Competition Policy, BYU Law: Future of Antitrust Series, Brussels, Belgium, Apr. 2023.

“Reforming Deposit Insurance,” Congressional Roundtable, House Financial Services Committee, Mar. 2023

“How Deals Die,” BYU Winter Deals Conference, Mar. 2023

“How Deals Die,” Penn/NYU Conference on Law and Finance, Feb. 2023

“Keynote Address: A Blueprint for Banking Reform,” Law and Financial Markets Review Conference, University of Manchester, Sept. 2022

“Federal Corporate Law and the Business of Banking,” 11th Law & Banking/Finance Conference, NYU, June 2021

“Federal Corporate Law and the Business of Banking,” Columbia Law School, Blue Sky Workshop, Nov. 2020

“Money and Banking,” Anti-Monopoly and Regulated Industries Summer Academy, July 2020

“Panel Discussion on Central Bank Digital Currencies,” Central Bank of the Future Conference, University of Michigan, Nov. 2020

“Federal Corporate Law and the Business of Banking,” Wharton Financial Regulation Workshop, Oct. 2020

“Federal Corporate Law and the Business of Banking,” Vanderbilt Law School, 22nd Annual Law & Business Conference, Aug. 2020

“FedAccounts: Digital Dollars,” Central Bank of the Future Roundtable, University of Michigan, June 2020

“FedAccounts: Digital Dollars,” Presentation to Congressional Staff (with introductory remarks by Senator Sherrod Brown), May 2020

“The Money Problem: Rethinking Financial Regulation,” presentation to Chartered Financial Analyst Society of Spain, May 2020

“FedAccounts: Digital Dollars,” Cato Institute Conference on Central Bank Digital Currency, May 2020

“FedAccounts: Digital Dollars,” Invited Presentation to the Federal Reserve’s Payment Systems and Legal Groups, May 2020

“Central Banking for All,” New York University School of Law, Faculty Workshop, Oct. 2019

“Money, Private Law, and Macroeconomic Disasters,” Georgetown University Law Center, Conference on Law & Macroeconomics, Sept. 2019

“Insider Trading, Private Law Entitlements, and the Cost of Capital,” National University of Singapore, Conference on Comparative Corporate Law & Governance, July 2019

“Insider Trading, Private Law Entitlements, and the Cost of Capital,” Vanderbilt Law School, 21st Annual Law & Business Conference, May 2019

“Insider Trading, Private Law Entitlements, and the Cost of Capital,” Boston College Regulation and Markets Workshop, Mar. 2019

“Central Banking for All,” Harvard Law School, Conference on Money as a Democratic Medium, Dec. 2018

“The Narrow Bank,” American Enterprise Institute, Dec. 2018

“Central Banking for All,” Vanderbilt Law School, 4th Annual Conference on Central Banking and Financial Regulation, Oct. 2018

“Money as Infrastructure,” New York University/ETH Zurich, Law & Banking Conference, June 2018.

“Money as Infrastructure,” The Wharton School of the University of Pennsylvania, Conference on Financial Regulation, Apr. 2018

“Money as Infrastructure,” Indira Gandhi Institute of Development Research, 8th Annual Emerging Markets Finance Conference, Mumbai, India, Dec. 2017

“Money as Infrastructure,” University of Ghent, Vanderbilt–Ghent Symposium on Corporate Law and Financial Regulation, May 2017

“The Money Problem,” Yale School of Management, Faculty Seminar, May 2017

“Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions,” Columbia Law School, Workshop on the Hierarchy of Money, Center on Global Legal Transformation/Committee on Global Thought, Oct. 2016

“The Money Problem,” Columbia University, School of International and Public Affairs, Book Talk, Oct. 2016

“Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions,” Federal Reserve Bank of Minneapolis, Fourth “Ending Too Big to Fail” Symposium, Sept. 2016

“Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions,” Better Markets, Quarterly Meeting of the Financial Stability Group, Sept. 2016

“Organizational Law as Commitment Device,” University of Colorado Law School, Faculty Colloquium, Sept. 2016

“The Money Problem,” Bank of England, One Bank Seminar Series, Book Talk, July 2016

“The Money Problem,” U.S. Treasury Department, Domestic Finance Division/Office of Capital Markets, Book Talk, June 2016

“The Money Problem,” NYU Law School, Law & Banking/Finance Conference (“The New Financial System in a Post-Crisis World”), Book Talk, June 2016

“The Money Problem,” Brookings Institution, Book Talk, May 2016

“The Money Problem,” Peterson Institute for International Economics, Book Talk, May 2016

“The Money Problem,” Center for American Progress, Book Talk, May 2016

“The Money Problem,” Cato Institute, Book Talk, May 2016

“The Money Problem,” Better Markets, Book Talk, May 2016

“The Money Problem,” Bipartisan Policy Committee, Book Talk, May 2016

“The Money Problem,” Harvard Business School (Finance Unit faculty and graduate students), Book Talk, April 2016

“The Money Problem,” Harvard Law School, Book Talk sponsored by the Modern Money Network, April 2016

“The Money Problem,” Columbia Law School, Financial Regulation Roundtable, Book Talk, March 2016

“Organizational Law as Commitment Device,” Hastings College of Law, Faculty Colloquium, November 2015

“A More Detailed Blueprint” (chapter 9 of book manuscript), Cornell Law School, Conference on Rethinking the Public-Private Balance in Financial Markets and Regulation, October 2015

“The Money Problem” (manuscript presentation), The Volcker Alliance, New York, NY, October 2015

“A More Detailed Blueprint” (chapter 9 of book manuscript), University of Colorado Law School, Junior Business Law Colloquium, July 2015

“Banks, Decentralization, and Development,” Harvard Law School, Conference on Money Design, Institute for Global Law and Policy, June 2016

“Rethinking Financial Reform” (chapter 10 of book manuscript), NYU Law School, Law & Economics Colloquium, April 2015

“Panics and the Macroeconomy” (chapter 4 of book manuscript), University of Colorado Law School, Junior Business Law Colloquium, July 2014

“Financial Instability and the Structure of Monetary Institutions” (Preface and Introduction of book manuscript), Duke Law School, Faculty Workshop, Sept. 2013

“The Future of Shadow Banking,” The Wharton School of the University of Pennsylvania, 16th Annual Wharton/Oliver Wyman Risk Roundtable (“Shedding Light on the Shadow Banking System”), May 2013

“Financial Instability and the Structure of Monetary Institutions” (Preface and Introduction of book manuscript), Fordham Law School, Research Seminar on Global Finance, Feb. 2013

“Taking the Money Market Seriously” (Introduction and chapter 1 of book manuscript), Harvard Law School, Workshop on the Political Economy of Modern Capitalism, Nov. 2012

“A Regulatory Design for Monetary Stability,” NYU Law School, Law & Banking/Finance Conference (“Tackling Systemic Risk”), April 2012

“Central Bank Independence and Financial Stability,” Levy Economics Institute/Ford Foundation, 21st Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies Debt, Deficits and Financial Instability, April 2012

“Regulating Money Creation After the Crisis,” Yale School of Management, Yale Conference on Finance and Macroeconomics– International Center for Finance, December 2011

“The Case for Regulating the Shadow Banking System,” Brookings Institution, Brookings-Nomura-Wharton Conference on Financial Markets, October 2011

“‘Moneyiness’ and Bank Runs,” Harvard Law School, Pro-Seminar on Re-Theorizing Liquidity, Institute for Global Law and Policy, June 2011

“Shadow Banking,” International Monetary Fund, Conference on Operationalizing Systemic Risk Monitoring, May 2010

“Shadow Banking and Financial Regulation,” Columbia Law School, Conference on The Financial Crisis: Can We Prevent a Recurrence?, March 2010

EXHIBIT 2

MATERIALS RELIED UPON

Statutory Provisions

12 U.S.C. § 248a.
12 U.S.C. § 342.
12 U.S.C. § 343.
12 U.S.C. § 1816.
12 U.S.C. § 3907.
31 U.S.C. § 5311 et seq.
13 WY STAT., ch. 12 (Special Purpose Depository Institutions).

Session Laws

Act of Mar. 3, 1865, ch. 78, 13 Stat. 469.
Bank Secrecy Act of 1970, Pub. L. No. 107-56, Title III, 115 Stat. 272, 296 (2001).
National Currency Act of 1863, ch. 58, 12 Stat. 665.
National Bank Act of 1864, ch. 106, 13 Stat. 99.

Regulations

12 C.F.R. § 5.20.
12 C.F.R. § 208.3.
12 C.F.R. § 201.4.
12 C.F.R. § 201.3.
12 C.F.R. § 217.11.
12 C.F.R. § 217.40.
31 C.F.R. § 1020.220.

Cases

Banco San Juan Internacional, Inc. v. Federal Reserve Bank of New York, Memorandum Opinion and Order, S.D.N.Y., Oct. 24, 2023.
Indep. Bankers Ass'n of Am. v. Heimann, 613 F.2d 1164 (D.C. Cir. 1979).
United States v. Phila. Nat'l Bank, 374 U.S. 321, 330 (1963).

Secondary Sources

“Fed Develops New Fraud Prevention Model.” *Central Banking*, June 19, 2020,
<https://www.centralbanking.com/central-banks/financial-market-infrastructure/7564751/fed-develops-new-fraud-prevention-model>.
Barr, Michael S., Howell E. Jackson, and Margaret E. Tahyar. 2018. *Financial Regulation: Law and Policy*. 2nd ed. Foundation Press.
Barrett, Devlin & Katy Burne. “FBI Investigating Bangladesh Bank-Account Heist,” *Wall Street Journal*, Mar. 18, 2016.

- Board of Governors of the Federal Reserve System. “Factors Affecting Reserve Balances of Depository Institutions,” available at www.federalreserve.gov/monetarypolicy/reservebalances_print.htm.
- Board of Governors of the Federal Reserve System. “Federal Reserve Board announces Reserve Bank income and expense data and transfers to the Treasury for 2022,” Jan. 13, 2023.
- Board of Governors of the Federal Reserve System. “Guide to the Federal Reserve’s Payment System Risk Policy on Intraday Credit,” effective July 20, 2023.
- Board of Governors of the Federal Reserve System. “Plans for Reducing the Size of the Federal Reserve’s Balance Sheet,” May 4, 2022.
- Board of Governors of the Federal Reserve System. “Principles for the Pricing of Federal Reserve Bank Services,” Nov. 20, 2008, https://www.federalreserve.gov/paymentsystems/pfs_principles.htm.
- Board of Governors of the Federal Reserve System. “Principles for Reducing the Size of the Federal Reserve’s Balance Sheet,” Jan. 26, 2022.
- Board of Governors of the Federal Reserve System. Interest Rate on Reserve Balances, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IORB>, November 30, 2023.
- Board of Governors of the Federal Reserve System. Structure of the Federal Reserve System, available at <https://www.federalreserve.gov/aboutthefed/structure-federal-reserve-system.htm>.
- Board of Governors of the Federal Reserve System. *The Federal Reserve System: Purposes and Functions*. 2016.
- Board of Governors of the Federal Reserve System. 2022. “Money and Payments: The U.S. Dollar in the Age of Digital Transformation.”
- Burns, Arthur. “Maintaining the Soundness of Our Banking System,” American Bankers Association Convention, Honolulu, Oct. 21, 1974.
- Carnegie Endowment for International Peace. “Timeline of Cyber Incidents Involving Financial Institutions,” <https://carnegieendowment.org/specialprojects/protectingfinancialstability/timeline>.
- Carnell, Richard Scott, Jonathan R. Macey, Geoffrey P. Miller, and Peter Conti-Brown. 2021. *The Law of Financial Institutions*. Aspen Publishing.
- Conti-Brown, Peter & Sean Vanatta. “Risk, Discretion, and Bank Supervision,” working paper, Mar. 30, 2023.
- Conti-Brown, Peter. 2023. Expert Report, *Custodia Bank, Inc. v. Federal Reserve Board of Governors and Federal Reserve Bank of Kansas City*.
- Davis, Kenneth Culp. *Administrative Law* (1958).
- Dowd, Kevin. 1996. *Laissez-Faire Banking*. Psychology Press.
- Duffie, Darrell, and Arvind Krishnamurthy. 2016. “Pass-Through Efficiency in the Fed’s New Monetary Policy Setting.” In *Economic Policy Symposium Proceedings*, Federal Reserve Bank of Kansas City.
- Federal Deposit Insurance Corporation. 1984. *The First Fifty Years: A History of the FDIC, 1933–1983*.
- Federal Financial Institutions Examination Council. *Bank Secrecy Act (BSA)/Anti-Money Laundering (AML) Examination Manual* (2015).
- Federal Reserve System. Fedwire Funds Service Disclosure, <https://www.frbservices.org/binaries/content/assets/crsocms/financial-services/wires/funds-service-disclosure.pdf>
- Federal Reserve System. Operating Circular No. 1, effective Sept. 1, 2023.
- Fisher, Irving. 1936. *100% Money*. Adelphi Company.
- Investment Company Institute. Press Release, “Money Market Fund Assets,” Nov. 22, 2023.

- James, John A., and David F. Weiman. 2010. "From Drafts to Checks: The Evolution of Correspondent Banking Networks and the Formation of the Modern U.S. Payments System, 1850-1914." *Journal of Money, Credit and Banking* 42 (2/3): 237–65.
- Menand, Lev, and Morgan Ricks. 2021. "Federal Corporate Law and the Business of Banking." *The University of Chicago Law Review* 88: 1361.
- Menand, Lev. 2021. "Why Supervise Banks: The Foundations of the American Monetary Settlement." *Vanderbilt Law Review* 74: 951.
- Miller, G. William. Statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Feb. 26, 1979.
- Office of the Comptroller of the Currency. *Comptroller's Licensing Manual: Charters* (2021).
- Ricks, Morgan, Ganesh Sitaraman, Shelley Welton, and Lev Menand. 2022. *Networks, Platforms, and Utilities: Law and Policy*.
- Ricks, Morgan. 2016. *The Money Problem: Rethinking Financial Regulation*. University of Chicago Press.
- Selgin, George A. 1988. *The Theory of Free Banking*. Rowman & Littlefield.
- Sprague, Irvine H. Statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Mar. 27, 1979.
- Stewart, James B. "Eight Days." *New Yorker*, Sept. 14, 2009.
- The Clearing House. About CHIPS, available at <https://www.theclearinghouse.org/payment-systems/CHIPS>.
- U.S. Treasury Department. *National Money Laundering Risk Assessment* (Feb. 2022).
- Wallerstein, Eric. "Americans Can't Stop Buying Money-Market Funds," *Wall Street Journal*, Aug. 11, 2023.
- White, Roger. "Federal Reserve Membership and Monetary Control Issue Brief Number IB79047," *Congressional Research Service*, Feb. 26, 1980.